

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) A computer-implemented method for ~~estimating an emotion term~~ simulating an emotion or behavior from a set of input PAD (Pleasure-Arousal-Dominance) values, comprising the steps of:

(a) providing a set of input PAD values in a memory;

(b) for each emotion in a PAD table of emotions, calculating a distance Distance_i between said set of input PAD values and an i^{th} record in a PAD table according to the following formula:

$$\text{Distance}_i = \sqrt{|P - P_i|^2 + |D - D_i|^2 + |A - A_i|^2}$$

where P, A, D are the input PAD values, and P_i , A_i , D_i are the P, A, D values for record i ,

(c) selecting the smallest value for Distance_i ; and

(d) converting the P_i , A_i , D_i value corresponding to the smallest value for Distance_i into an emotion term; and

deriving an emotion from the emotion term and simulating a feeling or behavior.

2. (Currently Amended) A method according to claim 1, wherein said method further includes the step of outputting an error factor, comprising the steps of:

(e) calculating $P_{\text{error}} = (P - P_i)$, $A_{\text{error}} = (A - A_i)$ and $D_{\text{error}} = (D - D_i)$ for the smallest value of Distance_i ; and

(f) outputting P_{error} , A_{error} and D_{error} .

3. (Cancelled)
4. (Original) A system according to claim 3, wherein said system further includes an error calculator for calculating an error factor between said input PAD values and the PAD values for the selected record.
5. (Cancelled)
6. (Currently Amended) A system for estimating a distance between a set of PAD (Pleasure-Arousal-Dominance) values and an emotion term and simulating an emotion or behavior, comprising:
 - an input for receiving said PAD values;
 - a calculator for calculating a distance between said input PAD values and said emotion term;
 - a transformer for transforming said distance into a percentage; ~~and~~
 - an output for outputting said percentage;
 - converting the percentage into an emotion term; and
 - deriving an emotion from the emotion term and simulating a feeling or behavior.
7. (Currently Amended) A computer implemented method for converting a set of n input PAD (Pleasure-Arousal-Dominance) values into a group emotion, comprising the steps of:
 - (a) inputting the input PAD values in a memory;
 - (b) calculating P_{avg} , A_{avg} and D_{avg} ; and
 - (c) converting P_{avg} , A_{avg} and D_{avg} into an emotion; and
 - (d) simulating a feeling or behavior from the emotion.

8. (Original) A method according to claim 7, wherein in said step (b), calculating P_{avg} , A_{avg} and D_{avg} includes calculating P_{median} , A_{median} and D_{median} .

9. (Previously Presented) A computer implemented system for converting a set of n input PAD (Pleasure-Arousal-Dominance) values into a ~~group emotion~~ simulated feeling or behavior, comprising:

an input having a memory for receiving the input PAD values;

a calculator for calculating P_{avg} , A_{avg} and D_{avg} ; and

a converter for converting P_{avg} , A_{avg} and D_{avg} into an emotion and a simulated feeling or behavior.

10. (Original) A system according to claim 9, wherein said calculator also calculates P_{median} , A_{median} and D_{median} .

11. (Previously Presented) A computer implemented method for converting a set of n input PAD (Pleasure-Arousal-Dominance) and AVC (Arousal Valence Control) values into an emotion [,] term for the purpose of data conversion and using AVC statistics to infer "mood" to simulate a feeling or behavior, comprising the steps of:

(a) inputting input PAD values to a memory;

(b) Converting AVC values into PAD values by first mapping them to PAD and then scaling each to the range from -100 to 100, mapping

A in AVC to A in PAD;

V in AVC to P in PAD;

C in AVC to D in PAD;

(c) calculating P_{avg} , A_{avg} and D_{avg} ; and

(d) converting P_{avg} , A_{avg} and D_{avg} into an emotion term; and

(e) deriving an emotion from the emotion term and simulating a feeling or behavior.

12-16. (Cancelled)